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We claim:-

1. A composite element comprising (i) material based on wood, 5 wood-like materials and/or wood substitute materials and (ii) thermoplastic polyurethane, wherein the thermoplastic polyurethane (ii) is based on the reaction of (a) hexamethylene diisocyanate with (b) compounds reactive toward isocyanates and having a molecular weight of from 500 to 10 8 000 g/mol and (c) chain extenders having a molecular weight of from 60 to 499 g/mol and if required, as chain terminators, monofunctional compounds reactive toward isocyanates, (d) catalysts and/or (e) conventional assistants.
- 15 2. A composite element as claimed in claim 1, wherein (i) is a wood board or particle board.
3. A composite element as claimed in claim 1, wherein (ii) is a 20 film or a film hinge containing thermoplastic polyurethane.
4. A composite element as claimed in claim 1, wherein the thermoplastic polyurethane (ii) is applied onto and/or into the material (i) by means of injection molding.
- 25 5. A furniture carcass comprising a composite element as claimed in any of claims 1 to 4.
6. A door comprising a composite element as claimed in any of 30 claims 1 to 4.
7. A film hinge based on a thermoplastic polyurethane.
8. A process for the production of a composite element as 35 claimed in any of claims 1 to 4, wherein thermoplastic polyurethane (ii) is applied by means of injection molding onto and/or into a material based on wood, wood-like material and/or wood substitute material.

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Composite element comprising (i) material based on wood, wood-like materials and/or wood substitute materials and (ii) thermoplastic polyurethane

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Abstract

A composite element in the furniture sector, preferably furniture doors and furniture carcasses, comprises (i) laminated or
10 unlaminated materials based on wood, wood boards or particle boards and/or wood-like materials, preferably based on wood boards or particle boards, and (ii) thermoplastic polyurethane. Processes for the production of these composite elements and in particular furniture carcasses or doors comprising the novel
15 composite elements are furthermore described. In particular, film hinges, preferably for furniture construction, for example for furniture carcasses, drawers or door frames, in particular for furniture carcasses based on thermoplastic polyurethanes are described.

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